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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,791	03/24/2004	Felipe O. Simoes	555255012725	4249

7590 01/09/2008  
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EXAMINER
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HUYNH, NAM TRUNG

ART UNIT	PAPER NUMBER
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2617

MAIL DATE	DELIVERY MODE
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01/09/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/807,791	<b>Applicant(s)</b> SIMOES ET AL.	
	<b>Examiner</b> Nam Huynh	<b>Art Unit</b> 2617	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 November 2007.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-30,32 and 33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30,32 and 33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/15/2007 has been entered.

### ***Response to Amendment***

This office action is in response to amendment filed on 10/30/2007. Of the previously presented claims 1-30, 32, and 33; claims 1, 2, 16, and 20 have been amended.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 1, 2, 5-18, 20, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hahn (US 5,648,712).

Regarding claims 1 and 16, Hahn discloses a universally interchangeable and modular power supply with integrated battery charger (title). In the scope of the invention, the charging unit (figure 1a, item 1) comprises a base wall (surface of the charger) with a receptacle defined in the base wall that faces downwardly when the base wall is position in a horizontal surface (figure 1a, item 2), a power converter (figure 1a, item 7), an output assembly (figure 14, item 196) for charging the battery of a mobile device, and an electrical contact (figure 1a, item 25) for receiving the input voltage positioned in the receptacle. Hahn further discloses a first input assembly (figure 1c, item 13) detachably associated with the charging unit such that the adapter forms part of the base wall with an outer surface that lies substantially parallel and in close or contacting proximity of the horizontal surface when installed (see figure 2 where the adapter is attached), said adapter having a face (see figure 3a the surface that holds item 16) with at least one electrical contact (figure 3a, item 16) for mating with the at least one electrical contact of the charging unit positioned on the face thereof, wherein the first input assembly faces the receptacle when installed therein,; and wherein said first input assembly is not capable of storing power for independent use. However, Hahn does not explicitly disclose or teach that the adapter has a power cord and a plug configured to mate with a style of electrical outlet such that the charging unit is

positionable at a remote location from the electrical outlet. However, in another embodiment, Hahn discloses an input assembly (figure 23, item 405) with a power cord (figure 23, item 401) and a plug (figure 23, item 403). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the adapter of Hahn (figure 1c, item 13) so that the contacts that interface with an external outlet (figure 1c, item 11) are integrated with a plug at the end of a power cord so that the charger may be used in situations where the outlet is placed in a difficult to reach area and to avoid blocking other unused outlets (column 10, lines 45-65).

Regarding claim 2, the charger of Hahn is compatible with different input assemblies (figures 1a-1c), which renders 1<sup>st</sup> and 2nd input assemblies.

Regarding claim 5, Hahn discloses electrical contacts in the output assembly (figure 16, item 52) configured to charge at least one of a battery and a mobile device.

Regarding claim 6, in an embodiment of the invention, Hahn discloses a docking station coupled to the charging unit (figure 24).

Regarding claim 7, with reference to figure 3a, the portion of the charger that receives item 16 renders the "socket".

Regarding claims 8-10, 17, and 21, Hahn discloses a latch mechanism comprising a recess (figure 3c, item 22) attached to the adapter and an arm (see figure 3c, the shaded portion that receives item 22) of the charging unit.

Regarding claims 11 and 18, Hahn discloses a release mechanism (figure 3c, item 20) for the latching mechanism.

Regarding claim 12, Hahn discloses an input assembly (figure 23, item 405) with a power cord (figure 23, item 401) and a plug (figure 23, item 403). All three components are integral as can be seen in the figure.

Regarding claims 13 and 14, Hahn discloses a power converter module (figure 1a, item 7) that receives an input source from contacts (figure 1a, item 25).

Regarding claim 15, it is further obvious to one of ordinary skill in the art that the power cord illustrated in figure 23 consists of separate parts configured to mate together to make one cord.

Regarding claim 20, the limitations are rejected as applied to claim 1. Furthermore it can be seen in figure 2, that the adapter has a face that has a substantially flat outer surface that allows that when installed is flush with the base wall of the charging unit.

5. Claims 3, 4, 19, 32, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hahn (US 5,648,712) in view of Huang (2002/0115480).

Hahn discloses the limitations set forth in claims 1 and 16, but does not explicitly disclose that the output assembly and the cord comprise a USB connector. Liao discloses a charging unit that comprises a USB connector (figure 11, item 833) and may be used with the USB connector of a computer (figure 10 and page 2, paragraph 24). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the charging unit of Hahn to be able to receive input power via a USB compatible device so that the charger may be used when a

conventional power outlet is not available as an input source, but a desktop or laptop computer is. This modification provides enhances the flexibility of the charger.

6. Claims 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hahn (US 5,648,712) in view of McKee et al. (US 4,893,351).

Regarding claim 22, Hahn discloses the limitations set forth in claim 20, but does latching mechanism comprises a pair of spring clips configured to engage a post defined in a receptacle. McKee et al. discloses a communication receiver with a latching receptacle and a connector cable with a mating plug (column 2, lines 30-39). In the scope of the invention, two spring members (spring clips) (figure 11, items 86, 88) are used to wrap around a mating plug (post) (figure 11, item 54). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the latching mechanism of Hahn, to include the locking configuration of McKee et al., in order to securely lock the charging unit to the charging housing and allow the charging unit to be quickly removed when necessary.

Regarding claim 23, McKee et al. shows guide grooves (recess) (figure 9, item 58) in which the spring members latch on the mating plug.

Regarding claim 24, McKee et al. discloses a lever arm (figure 11, item 51) that when pushed in a downward direction or "plunging" direction, spreads the spring members apart which can be seen in figure 12.

Regarding claim 25, McKee et al. discloses a guide (figure 9, item 66) for guiding the plug.

7. Claims 26-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hahn (US 5,648,712) in view of Wei et al. (US 6,371,535).

Regarding claim 26, Hahn discloses the limitations set forth in claim 20, but does not explicitly disclose detents that are used to engage spring biased ball bearings. Wei et al. discloses an easily releasable locking device for detachably securing a battery pack to a portable battery-powered apparatus (title). In the scope of the invention, spring loaded latching members (figure 3, items 23, 25) are configured to lock into detents of the engaging portion (figure 3, item 111). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the latching mechanism of Hahn, to include the latching/locking configuration taught by Wei et al., in order to allow the charging unit to be easily attached and removed from the charging housing.

Regarding claim 27, although none of the cited references explicitly discloses an L shaped cross-section, it would have been further obvious to one of ordinary skill in the art to design the shape of the guide bars or structure in order to meet specification and design criteria.

Regarding claims 28-30, Wei et al. teaches the use of a release mechanism (column 3, lines 44-57).

### ***Response to Arguments***

8. Applicant's arguments with respect to claims 1-30, 32, and 33 have been considered but are moot in view of the new ground(s) of rejection.



***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Harvey (US 6,753,671)

Wu (US 6,126,460)

Dixon (US 6,064,177)

Wiegand et al. (US 5,138,351)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nam Huynh whose telephone number is 571-272-5970. The examiner can normally be reached on 8 a.m.-5 p.m..

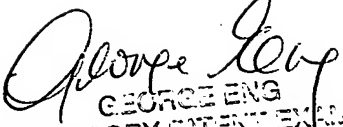
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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1/4/08

  
GEORGE ENG  
SUPERVISORY PATENT EXAMINER